DOCUMENT RESUME

ED 303 516 TM 012 783

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TITLE A Comparison of Measures of Administrator Reliance on Power Bases for Influence.
PUB DATE 6 Jan 89
NOTE 21p.; Paper presented at the Annual Meeting of the Southwest Educational Research Association (Houston, TX, January 26, 1989).
PUB TYPE Speeches/Conference Papers (150) -- Reports - Evaluative/Feasibility (142) -- Tests/Evaluation Instruments (160)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Administrative Organization; *Administrators; Comparative Analysis; Factor Analysis; *Leadership; *Organizational Theories; *Power Structure
IDENTIFIERS Ipsative Measurement; *Power Perception Profile; *Richardson Power Profile

ABSTRACT

This paper compares the Hersey-Natemeyer "Power Perception Profile" with the "Richardson Power Profile (RPP)," both of which are measures of a leader's reliance on power bases to affect followers within organizations. Two previously conducted factor analyses of the normative measure--the RPP--indicate that there are fewer than the expected seven factors underlying perceptions of power base use in organizations. These findings suggest that the Hersey-Natemeyer measure can only be used with caution because the measure is ipsative and is structured to require the presumption that seven discrete power bases exist, a presumption that seems tenuous at best. The identification of fewer factors than theories have proposed suggests that the conceptualization of the power bases may need to be refined. Apparently, the power bases are not all independent or discrete. A normative measure may have more utility than any ipsative measure. Selected factor pattern coefficients for the RPP are listed, and the RPP and its scoring grid are appended. (Author/SLD)

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ED303516

A COMPARISON OF MEASURES OF ADMINISTRATOR RELIANCE ON POWER BASES FOR INFLUENCE

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TM012783

ABSTRACT

The paper compares the Hersey-Natemeyer Power Perception Profile with the Richardson Power Profile, both of which are measures of a leader's reliance upon power bases to affect followers within organizations. Based on theoretical considerations and empirical results, it is suggested that the Hersey-Natemeyer measure can only be used with the gravest caution, especially since the measure is ipsative in nature. A copy of the Richardson Power Profile is appended.

The purpose of this paper is to compare two instruments developed to measure perceptions of the use of power within organizational settings. The use of power is fundamental to every organzation. As organizations become more complex, managers increasingly need power to influence the people on whom they depend. Leaders may exert their power in a positive, democratic manner or in a negative, authoritarian or Machavellian style (McClelland, 1975).

French and Raven (1959) identified six types of social power that may be utilized as sources of influence. Hersey, Blanchard, and Natemeyer (1979) integrate the concept of power in their situational leadership theory. They suggest that administrators may rely on some combination of seven power bases when exercising influence: 1) reward power, based on the ability to reward; 2) coercive power, based on the ability to punish; 3) legitimate power, based on followers' feelings of "oneness" with the leader; 5) expert power, based on perception that an administrator possesses unique insight or expertise; 6) information power, based on access to information not generally available to followers; and 7) connection power, based upon the administrator's ties with powerful others. This last power base was an addition to French and Raven's (1959) original six bases of influence.

Hersey and Blanchard (1977) suggest that reliance upon different power bases should be varied in light of the maturity level of the followers. Different forms of power should be used depending upon the subordinates' willingness to accept

responsibility, ability to set high but attainable goals, and their experience and education.

A theory becomes more useful when it's constructs can be adequately measured. Hersey and Natemeyer (1979) developed a power perception instrument consisting of 21 pairs of reasons selected by followers for following leaders' directives. Subjects are required to choose one item from within each item pair. This forced-choice response format provides ipsative or quasi-ipsative measaurement because the respondents are restricted in their answers and are forced to choose between a given pair of reasons.

Ipsative measures are limited. They restrict responses to other items and usual statistical analyses are not applicable. Generally, normative measures are preferred over ipsastive ones. As Kerlinger (1973, p. 509) explains,

> the important limitation on ipsative procedures is that, strictly speaking, the usual statistics are not applicable, since such statistics depend upon assumptions that ipsative procedures systematically violate. Moreover, the ipsative procedure produces spurious negative correlations between items.

The Richardson Power Rights (RPP) (Richardson & Thompson, 1981) was developed to measure perceptions of a leader's use of seven power bases: coercion, connection, reward, legitimate, referent, information, and expert (Hersey, Blanchard & Natemeyer, 1979). The instrument's items are randomly ordered. Subjects rate the extent to which their leader utilizes the approach

presented in each item; ratings are indicated by marking through disagree-agree continua (Thompson, 1981). The responses are subsequently scored on an equal-interval scale. A copy of the instrument is presented in Appendix A.

The RPP's response format is considered "normative" because the responses to a given item do not restrict responses to other items (Cattell, 1944). A pilot study was conducted to investigate the construct validity of the RPP and to compare perceptions of power use derived with the Power Perception Profile-Perception of Other (Hersey & Natemeyer, 1979). A factor analysis of RPP data was performed to address questions of construct validity. As Richardson and Thompson (1981, p. 6) report, "Seven factors accounting for 61.9% of the variance of the 41 items were extracted from the inter item correlation matrix and rotated to the varimax criterion." Factor adequacy coefficients were computed to compare the actual results to theoretically expected results (Thompson, 1986; Thompson & Pitts, 1981/82). The factor adequacy coefficients for the seven factors were, respectively, 0.83, 0.93, 0.99, 0.99, 0.99, 0.88, and 0.86 (Richardson & Thompson, 1981). These results indicate that the RPP is a reasonably valid measure of perceived influence.

It was also found that some items were correlated with bases the items were not purported to measure. But the authors concluded that "this is not entirely unexpected, since the power bases may not be perfectly uncorrelated" (Richardson & Thompson, 1981, p. 7). As Martin (1978, p. 52) notes, "it appears that these forms of power, however, are not indepenent."

In another study, Richardson (1981) investigated the relationship between power orientation and ego development of school principals. The subjects were teachers who were asked to report their perceptions of the principal's power base reliance using the Richardson Power Profile. Since the teachers represented a sample from a population, the instrument's subscales were identified by conducting a canonical factor analysis. This technique solves for a maximum likelihood estimate of the factor structure in the population.

Although the seventh factor was statistically significant (chi square = 903.8, df = 555, $p < .01$), the factor was a "singlet" (a factor defined by only one item) which did not clarify the solution. Therefore six factors were extracted and rotated to the varimax criterion. The six factors accounted for 59.8% of the variance of the RPP's 41 items. The factors respectively measured use of the following types of power: a) expert/legitimte, b) connection, c) reward, d) coercive, e) information, and f) referent.

The RPP was also used by Miller (1983) in a subequent study. Four factors were extracted, instead of the six identified in the Richardson (1981) study. These four factors accounted for 55.5% of the variance among the questionnaire items. Factor 1, which the researcher labelled Respect, included power orientations previously designated as Expert, Referent, and Legitimate. Other factors identified were Connection, Coercion and Reward power. Table 1 presents selected scale items and corresponding factor structure coefficients identified in this study (Miller, 1983, p. 70).

INSERT TABLE 1 ABOUT HERE.

Interpretation of Results

Two factor analyses of a non-ipsative (i.e., normative) measure of power base reliance, the Richardson Power Profile (RPP) indicates that there are fewer than the expected seven factors underlying perceptions of power base use in organizations. These findings suggest that the Hersey and Natemeyer (1979) measure can only be used with the gravest caution, since the measure is ipsative and is structured to require the presumption that seven discrete power bases exist. This presumption seems tenuous at best.

Findings with normative measures of power base use suggest that legitimate power tends to be correlated with expert power. This is not too surprising, since experts should be more likely than others to acquire legitimate authority; consequently these two power bases may be perceived as being similar. Earlier studies in school settings (McGee, 1964; Ringrose 1977; Zirket & Gauditus, 1979) indicate that teachers consider legitimate and expert power to be the preferred bases for leadership.

Miller (1983) examined the factor labelled Respect to determine why it enveloped power orientations previously identified as Expert, Referent, and Legitimate. He based his conclusion on French and Raven's (1959) explanation that legitimate power reflects an individual's feelings that leaders ought to exert influence over their subordinates. With referent power, compliance with one's superior yields an identity which is

non-threatening. Generally administiators are perceived as having earned the expertise which resulted in their position. Miller (1983) concluded it is reasonable that teachers perceive the principal as a fellow teacher (referent power) elevated to a position of authority (legitimate power) because of a unique combination of experience, service, and professional expertise (expert power).

Summary

The identification of fewer factors than the theories of French and Raven (1959) and Hersey and Blanchard (1977) proposed is important because it suggests that the conceptualization of the power bases may need to be refined. Apparently the power bases are not all independent or discreet. Moreover, both theoretical measurement considerations and empirical results suggest that an ipsative measure built upon the premise that power bases are distinct can only be used with grave caution. Therefore, it is suggested that a normative measure of power base reliance, such as the Richardson Power Profile, may have more utility.

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Francisco.

Table 1

Selected Factor Pattern Coefficients

For Richardson, Power Profile

Factor	Item	Pattern Coefficient
I - Respect	4. The administrator's knowledge, judgment and experience are respected.	.88
	13. People recognize the administrator's skills and accomplishments.	.87
	41. The administrator uses expertise to help others.	.83
II - Connection	19. The administrator has "connections" with influencial and important people.	.80
	30. The adminisrator's association with important persons is well known.	.73
	33. The administrator can use influence with friends.	.72
III - Coercive	6. They fear reprisal if they don't follow the administrator's lead.	.74
	24. They suspect they might be punished if they do not cooperate.	.60
	16. They are aware of possible negative consequences for not cooperating.	.57
IV - Reward	36. The administrator provides appropriate rewards to encourage people to follow directions.	.76
	35. The administrator rewards people who cooperate.	.64
	21. The administrator has gained allegiance by rewarding desired behavior.	.62

APPENDIX A:

THE RICHARDSON POWER PROFILE

Note. Researchers are hereby granted permission to use the RPP provided (a) the instrument is for non-profit use in research, (b) the copyright notice is reprinted as part of the instrument and is not altered; and (c) the researchers notify the authors of their results, so that the research can be cited in a compilation of studies in which the RPP has been utilized. Author addresses are:

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rpp.rno

Richardson Power Profile (RPP)

Instructions: Draw a line through the scale below each item at the point which best indicates how you feel about the item.

EXAMPLE
Ice cream tastes good.

DISAGREE _____/_____ AGREE

This person moderately agreed that ice cream tastes good.

IN MY WORK SETTING, WHEN PEOPLE FOLLOW _____'s LEADERSHIP, THEY DO SO BECAUSE...

1. The administrator can bestow favors through powerful connections.
   DISAGREE _____ AGREE

2. People can relate to the administrator as a person.
   DISAGREE _____ AGREE

3. People believe they should follow the lead of the person occupying the administrator's position.
   DISAGREE _____ AGREE

4. The administrator's knowledge, judgment and experience are respected.
   DISAGREE _____ AGREE

5. The administrator uses a "speak softly and carry a big stick" approach.
   DISAGREE _____ AGREE

6. They fear reprisal if they don't follow the administrator's lead.
   DISAGREE _____ AGREE

7. People like the administrator personally.
   DISAGREE _____ AGREE

8. The office which the administrator holds is respected.
   DISAGREE _____ AGREE

9. The administrator has the legitimate authority to lead.
   DISAGREE _____ AGREE

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10. The administrator's judgment and experience foster cooperative effort.
DISAGREE _____ AGREE

11. The administrator has "up to date" information about what Board members (or corporate officers) are thinking.
DISAGREE _____ AGREE

12. The administrator rewards people who follow directions.
DISAGREE _____ AGREE

13. People recognize the administrator's skills and accomplishments.
DISAGREE _____ AGREE

14. People care for the administrator as a person.
DISAGREE _____ AGREE

15. The administrator has valuable insight into the superintendent's (or CEO's) views.
DISAGREE _____ AGREE

16. They are aware of possible negative consequences for not cooperating.
DISAGREE _____ AGREE

17. It's the administrator's job to lead, and expect to be followed.
DISAGREE _____ AGREE

18. People respect the authority the administrator derives from good connections.
DISAGREE _____ AGREE

19. The administrator has "connections" with influential and important people.
DISAGREE _____ AGREE

20. The administrator's knowledge of specific skills minimizes doubt and confusion.
DISAGREE _____ AGREE

21. The administrator's sharing of important political information makes people feel "in on things".
DISAGREE _____ AGREE

22. The administrator has gained allegiance by rewarding desired behavior.
DISAGREE _____ AGREE

23. Influential connections may support the administrator.
DISAGREE _____ AGREE

24. They suspect that they may be punished if they do not cooperate.
DISAGREE _____ AGREE

25. People respect the administrator's knowledge of "inside" information about political issues.
DISAGREE _____ AGREE

26. People would not risk their friendship with the administrator.
DISAGREE _____ AGREE

27. The administrator's position in the organization conveys the authority to direct work activities.
DISAGREE _____ AGREE

28. People want the reinforcements which the administrator offers.
DISAGREE _____ AGREE

29. Irresponsible behaviors harmful to the organization may be punished.
DISAGREE _____ AGREE

30. The administrator's association with important persons is well known.
DISAGREE _____ AGREE

31. People feel the administrator is a special kind of person.
DISAGREE _____ AGREE

32. People believe they should respect the administrator's position.
DISAGREE _____ AGREE

33. The administrator can use influence with friends.
DISAGREE _____ AGREE

34. The administrator knows what is really "going on" in the system.
DISAGREE _____ AGREE

35. The administrator rewards people who cooperate.
DISAGREE _____ AGREE

36. The administrator provides appropriate rewards to encourage people to follow directions.
DISAGREE _____ AGREE

37. The administrator supplies needed "political" information.
DISAGREE _____ AGREE

38. The administrator motivates people through the promise of reward.
DISAGREE _____ AGREE

39. People do not want to hurt the administrator's feelings.
DISAGREE _____ AGREE

40. Displeasure may be expressed otherwise.
DISAGREE _____ AGREE

41. The administrator uses expertise to help others do a better job.
DISAGREE _____ AGREE

APPENDIX B: SCORING GRID

Note. The researcher can create a scoring grid by making a transparency of the attached sheet, and then using the transparency as a scoring overlay on completed RPP instruments.

SCORING GRID

| 1| 2| 3| 4| 5| 6| 7| 8| 9|10|11|12|13|14|15|

| 1| | 3| | 5| | 7| | 9| |11| |13| |15|

| | 2| | 4| | 6| | 8| |10| |12| |14| |

| 1| | 3| | 5| | 7| | 9| |11| |13| |15|

| | 2| | 4| | 6| | 8| |10| |12| |14| |

| 1| | 3| | 5| | 7| | 9| |11| |13| |15|

| | 2| | 4| | 6| | 8| |10| |12| |14| |

| 1| | 3| | 5| | 7| | 9| |11| |13| |15|

| | 2| | 4| | 6| | 8| |10| |12| |14| |

| 1| | 3| | 5| | 7| | 9| |11| |13| |15|

| | 2| | 4| | 6| | 8| |10| |12| |14| |

| 1| | 3| | 5| | 7| | 9| |11| |13| |15|

| | 2| | 4| | 6| | 8| |10| |12| |14| |

| 1| | 3| | 5| | 7| | 9| |11| |13| |15|

| | 2| | 4| | 6| | 8| |10| |12| |14| |

| 1| | 3| | 5| | 7| | 9| |11| |13| |15|

| | 2| | 4| | 6| | 8| |10| |12| |14| |

| 1| | 3| | 5| | 7| | 9| |11| |13| |15|

| | 2| | 4| | 6| | 8| |10| |12| |14| |

| 1| | 3| | 5| | 7| | 9| |11| |13| |15|

| | 2| | 4| | 6| | 8| |10| |12| |14| |

APPENDIX C: SCORING KEY

Item	Reward	Coerci	Legiti	Refere	Expert	Inform	Connec
1							1
2				1			
3			1				
4					1		
5		1					
6		1					
7				1			
8			1				
9			1				
10					1		
11						1	
12	1						
13					1		
14				1			
15						1	
16		1					
17			1				
18							1
19							1
20					1		
21						1	
22	1						
23							1
24		1					
25						1	
26				1			
27			1				
28	1						
29		1					
30							1
31				1			
32			1				
33							1
34						1	
35	1						
36	1						
37						1	
38	1						
39				1			
40		1					
41					1		
TOTAL	6	6	6	6	5	6	6
	Reward	Coerci	Legiti	Refere	Expert	Inform	Connec

To create what would be standard scores with mean=100 and SD=15 if the data were normally distributed, for all scales EXCEPT "Expert Power": (1) add the scores (1-15) for all the items for a given scale; (2) multiply each scale score by 2.143; and then (3) substract 2.86 from the scale total. For "Expert Power": (1) add the scores (1-15) for all the items for a given scale; (2) multiply each scale score by 2.571; and then (3) substract 2.84 from the scale total.